Wisconsin
Department of Commerce

Evaluation # 200212-I

Safety & Buildings Division
201 West Washington Avenue
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Wisconsin
Building Products Evaluation

Material	Kolpak Foam Plastic Sandwich Panels
Manufacturer	KMT Refrigeration, Inc. 715 St. Croix Street River Falls, WI 54022
Additional Listee	Kolpak 2915 Tennessee Ave. N. Parsons, TN 38363

SCOPE OF EVALUATION

The **Comm** requirements below are in accordance with the current Wisconsin Building And Heating, Ventilating And Air Conditioning Code:

- **Foam Plastic Core Material:** General Latex & Chemical Corp. (Vultafoam XR-1149, XR-1149R and Brin-Mont Corp. BMC 92-Q-48 foam), used in the Kolpak foam plastic sandwich panel was evaluated under the foam plastic requirements in accordance with **s. Comm 51.06(2**) and **s. Comm 51.06(7).**

- **Nonstructural Wall and Ceiling Panel:** The Kolpak foam plastic sandwich panel was evaluated as a nonstructural wall and ceiling panel for use in combustible and noncombustible 0-hour rated construction, refrigerated facilities and freezer warehouses in accordance with **s. Comm 51.06(6)(a)3.**, and as general refrigerated facilities in accordance with **s. Comm 51.06(6)(a)1.** and **s. Comm 51.06(7)**.

The **IBC** requirements below are in accordance with of the Wisconsin Amended ICC 2000 Code (**effective 7/1/02**):

- **Foam Plastic Core Material:** General Latex & Chemical Corp. (Vultafoam XR-1149, XR-1149R and Brin-Mont Corp. BMC 92-Q-48 foam), used in the Kolpak foam plastic sandwich panel was evaluated under the foam plastic requirements in accordance with **ss. IBC 2603.1**, **2603.2**, **2603.3** and **Exception 2**, **2603.5.2**, **2603.5.2** and **s. IBC 2603.7**.

- **Nonstructural Wall and Ceiling Panel:** The Kolpak foam plastic sandwich panel was evaluated as a nonstructural insulated wall and ceiling panel used in refrigerated facilities and freezer warehouses in accordance with **ss. IBC 2603.4.1.2**, **2603.4.1.3**, **2603.5.2** and **2603.7**.

The structural performance and thermal transmission properties of the panels (for both codes) are outside the scope of this evaluation and are subject to specific evaluation and approval by the code official.

DESCRIPTION AND USE

Kolpak panel: Insulated wall and ceiling refrigeration panels with maximum 6 inch thick polyurethane foam core (General Latex & Chemical Corporation XR-1149, XR-1149R or Brin-Mont Corporation BMC 92-Q-48 foam system) and minimum 0.0179-inch thick stainless steel or minimum 0.0217-inch thick painted (optional) galvanized, galvannealed or Galvalume steel facings. Steel facings of panels must be positively secured to the foam core by 1) securement of the entire panel assembly to supporting structural members with mechanical fasteners or 2) positive securement of the interior panel facer to the exterior panel facer with mechanical fasteners.

Koplak Refrigeration Panel: Insulated wall and ceiling refrigeration panels with maximum 4 inch thick polyurethane foam core (General Latex & Chemical Corporation Vultafoam XR-1149, XR-1149R foam system) and minimum 0.0179-inch thick embossed Galvalume coated steel minimum 0.0239-inch thick painted (optional) galvanized steel or 0.0299-inch thick stainless steel facings. Steel facings of panels must be positively secured to the foam core by 1) securement of the entire panel assembly to supporting structural members with mechanical fasteners or 2) positive securement of the interior panel facer to the exterior panel facer with mechanical fasteners.

TESTS AND RESULTS

ASTM E-84 tests on the unfaced, **4-inch** thick polyurethane core (apparent density 2.0 lb./ft^3), showed a flame spread rating of 25 and a smoke developed rating of 190.

Factory Mutual Research conducted their full-scale room corner test (FM 4880) on galvanized steel-faced panels for wall/ceiling with **6-inch** thick polyurethane cores. The wall/ceiling panels met the Factory Mutual Research requirements for a Class I fire rating and met code requirement for use without a thermal barrier and 30 foot height limitation. The test data is on file with the department.

ASTM D1929 test data for flash ignition and self-ignition temperatures: flash ignition 950º F (510º C) and self-ignition 1005º F (540º C). The test data is on file with the department.

LIMITATIONS OF APPROVAL

The **Comm** limitations below are in accordance with the current Wisconsin Building And Heating, Ventilating And Air Conditioning Code:

- **Nonstructural Wall and Ceiling Panel: Section Comm 51.06(7)** allows the use of the Kolpak panel without a thermal barrier and automatic sprinkler system based on diversified tests up to a maximum height of 30 feet. The Kolpak panels are approved for use to a maximum height of 30 feet without a thermal barrier and without an automatic sprinkler system required under **s. Comm 51.06(6)(a)3.**, and as general refrigerated facilities in accordance with **s. Comm 51.06(6)(a)1.**

The **IBC** limitations below are in accordance with of the Wisconsin Amended ICC 2000 Code (**effective 7/1/02**):

- **Nonstructural Wall and Ceiling Panel: Section IBC 2603.7** allows the use of the Kolpak panel without a thermal barrier and automatic sprinkler system based on diversified tests up to a maximum height of 30 feet. The Kolpak panels are approved for use to a maximum height of 30 feet without a thermal barrier and without an automatic sprinkler system (for refrigerated facilities and freezer warehouses), required under **ss. IBC 2603.3** and **Exception 2.**, and **ss. IBC 2603.4.1.2**, **2603.4.1.3** and **2603.5.2**.

NOTES:

1. Under both codes, for refrigerated buildings only, building heights exceeding 30 feet, and panels up to 10 inches thick maximum, thermal barriers on both sides of the panel shall be required for proper protection.
2. Other sections of both codes may require an automatic sprinkler system based on limitations of occupancy, area, height, etc., or may specify stricter height limitations.

Installation shall be in accordance with the Factory Mutual Research listings, the manufacturer's instructions and this evaluation. In the event of conflicts, the more strict requirement shall govern.

This approval will be valid through December 31, 2006, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:

Approval Date: February 14, 2002 By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau

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